

## PRELIMINARY REPORT HIGHWAY HWY16MH005

The information in this report is preliminary and will be supplemented or corrected during the course of the investigation.

About 6:37 a.m. Pacific standard time on Tuesday January 19, 2016, a 2014 MCI D4505 motorcoach, operated by Greyhound Lines Inc. and occupied by a 58-year-old driver and 20 passengers, was traveling northbound on US Highway 101 (US-101) in San Jose, Santa Clara County, California. The bus had departed from Los Angeles at 11:53 p.m. on January 18, with planned stops in San Jose, San Francisco, and Oakland, California. The weather conditions were dark, with light-to-heavy rain and south-southeast winds of 11–23 mph reported in the area.

At the US-101/State Route 85 (SR-85) interchange, northbound US-101 consisted of four mainline travel lanes, a single left high occupancy vehicle (HOV) lane for northbound SR-85, and two right exit lanes for northbound SR-85. A gore area approximately 1,000 feet long separated the left HOV exit lane and the US-101 through lanes. This area widened to about 22 feet at the point where a reusable energy absorbing crash terminal (REACT) 350 nine-barrel crash attenuator was in place in advance of a concrete barrier. The barrier physically separated the left HOV exit lane from northbound US-101.

Rather than continuing with either the left HOV SR-85 exit lane or the US-101 mainline travel lanes, the bus traveled through the gore and collided with the crash attenuator. The bus then rode up on the concrete barrier, rotated counterclockwise, and rolled 90 degrees to the right. The bus came to rest on its right side on top of the concrete barrier, with the rear of the bus resting on the northbound US-101 travel lanes and the front of the bus hanging over the left HOV SR-85 exit lane. The bus traveled approximately 65 feet from the point of initial impact with the crash attenuator to its final rest position (see figure 1).





**Figure 1.** Final rest position of bus and remains of REACT 350 crash attenuator base (left); diagram of exemplar REACT 350 crash attenuator (right). Note: The retroreflective sheeting shown on the first barrel had been damaged and was not present at the time of the crash.

Two of the 20 passengers were ejected and died. The driver and 12 passengers sustained minor-to-serious injuries; six passengers were uninjured. The bus was equipped with lap and shoulder seat belts for all 50 passenger positions. The two passengers who reported wearing seat belts were not injured.

Using three-dimensional laser scanning technology, NTSB investigators documented the crash location, and the interior and exterior of the bus for further analysis (see figure 2).



Figure 2. 3D scan image of damaged MCI motorcoach.

No mechanical defects were identified in the initial inspection of the bus. The driver's preliminary toxicology test results were negative for alcohol and illicit drugs. The bus was equipped with multiple systems capable of recording and transmitting event-related data, including inward- and outward-facing cameras and location tracking. NTSB investigators will continue to collect and analyze these data, including all pertinent information in the areas of human performance, survival, highway, vehicle, and motor carrier factors.

All aspects of the crash remain under investigation as the NTSB determines the probable cause, with the intent of issuing recommendations to prevent similar crashes. The NTSB is working alongside the California Highway Patrol, which is conducting a separate, parallel investigation.